

CALUMET & HECLA MINING COMPANY, WAREHOUSE NO. 1
120 Red Jacket Road
Calumet
Houghton County
Michigan

HABS MI-423
MI-423

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
U.S. Department of the Interior
1849 C Street NW
Washington, DC 20240-0001

HISTORIC AMERICAN BUILDINGS SURVEY

CALUMET AND HECLA MINING COMPANY, WAREHOUSE NO. 1

HABS No. MI-423

Location: 120 Red Jacket Road, 180' west of the intersection of Red Jacket Road and Mine Street on the south side of the road, Calumet Township, Houghton County, Michigan.

Present Owner: Kenneth Farley, 5011 Linwood Road, Hubbell, Michigan.

Present Use: The building is now the North End Metal and Supply Shop, with a rock shop for tourists.

Significance: With operations expanding and profiting, the Calumet and Hecla Mining Company built Warehouse No.1 in order to consolidate its scattered supplies and to centralize ordering and distribution. The warehouse is a handsome and solidly constructed building typical of Calumet and Hecla structures.

Historian: Wendy Nicholas, 1975.

PART I. HISTORICAL INFORMATION

A. Physical History

1. Dates of Erection: 1893-1894. The warehouse was constructed between June of 1893 when the Calumet and Hecla architects drew plans for building and was finished in time for the publication of the 1894 annual report, in which the company president Alexander Agassiz announced that "a new brick warehouse has been completed [. . .]."

2. Architect: Members of the Architectural Section of the Calumet and Hecla Mining Company's Engineering Department were responsible for the warehouse design.

3. Original and Subsequent Owners: The warehouse property lies in two sections, numbered 14 and 23. The Calumet and Hecla Mining Company acquired the property in the two sections at different times from different sources, and separate chains of titles are attached. After the mining company's merger with Universal Oil Products in 1968, the warehouse was sold to Mr. Kenneth Farley. The citation for that sale is as follows:

Universal Oil Products to
Kenneth F. Farley & wife
April 3, 1972, rec. April 17, 1972.
Vol. 30, p. 59.

QUIT CLAIM DEED

for \$30,000.

The chain of title for the property (sections 14 and 23) is as follows:

Twp. 56N Range 33W Section 23

I. E $\frac{1}{2}$ S $\frac{1}{2}$ of NW $\frac{1}{4}$, SW $\frac{1}{4}$ of SW $\frac{1}{4}$ E $\frac{1}{2}$ of SW $\frac{1}{4}$ PATENT
State of Michigan to
St. Mary's Falls Ship Canal Co.
May 25, 1855, rec. Sept. 4, 1875.
Vol. 17, p. 2.

II. E $\frac{1}{2}$ S $\frac{1}{2}$ of NW $\frac{1}{4}$ NE $\frac{1}{4}$ of SW $\frac{1}{4}$, S $\frac{1}{2}$ of SW $\frac{1}{4}$ WARRANTY DEED
St. Mary's Falls Ship Canal Co. to
St. Mary's Canal Mineral Land Co.
June 8, 1860, rec. June 23, 1862.
Vol. 5, p. 316.

III. E $\frac{1}{2}$ S $\frac{1}{2}$ of SW $\frac{1}{4}$, S $\frac{1}{2}$ of NW $\frac{1}{4}$, NE $\frac{1}{4}$ of SW $\frac{1}{4}$ WARRANTY DEED
St. Mary's Canal Mineral Land Co. to
Hecla Mining Co.
Sept. 11, 1866, rec. Oct. 15, 1866.
Vol. 8, p. 371.

IV. Merger of Calumet w/ Hecla Mining Co. to form the Calumet & Hecla Mining Co.
March 1871
Red Metal, p. 72.

V. Formation of the Calumet & Hecla Consolidated Copper Co.
Sept. 10, 1923.
Red Metal, p. 140.

VI. Formation of Calumet & Hecla, Inc.
Nov. 8, 1952.
Vol. MR-25, p. 312.

VII. Merger of Calumet & Hecla with Universal Oil Products
April 25, 1968.

Twp. 56N Range 33W Section 14

I. E $\frac{1}{2}$ of SE $\frac{1}{4}$ & W $\frac{1}{2}$ of SW $\frac{1}{4}$ PATENT
State of Michigan to St. Mary's Falls Ship Canal Co.
May 25, 1855, rec. June 6, 1866.
Vol. 17, p. 2.

II. E $\frac{1}{2}$ of SE $\frac{1}{4}$ & W $\frac{1}{2}$ of SW $\frac{1}{4}$
St. Mary's Falls Ship Canal Co. to
St. Mary's Canal Mineral Land Co.
June 8, 1860, rec. June 23, 1862.
Vol. 5, p. 316.

WARRANTY DEED

III. E $\frac{1}{2}$ of SE $\frac{1}{4}$
St. Mary's Canal Mineral Land Co. to
Calumet Mining Co.
Dec. 12, 1865, rec. June 16, 1866.
Vol. 8, p. 311.

WARRANTY DEED

IV. Merger of Calumet w/ Hecla Mining Co. to form the Calumet & Hecla Mining Co.
March 1871
Red Metal, p. 72.

V. Formation of the Calumet & Hecla Consolidated Copper Co.
Sept. 10, 1923.
Red Metal, p. 140.

VI. Formation of Calumet & Hecla, Inc.
Nov. 8, 1952.
Vol. MR-25, p. 312.

VII. Merger of Calumet & Hecla with Universal Oil Products
April 25, 1968.

Legal Description – No. 1 Warehouse Site for Mr. Ken Farley

A parcel of land situate and being within the Southeast Quarter of the Southeast Quarter (SE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section Fourteen (14) and the Northeast Quarter of the Northeast Quarter (NE $\frac{1}{4}$ NE $\frac{1}{4}$) of Section Twenty-three (23), Township Fifty-six (56) North, Range Thirty-three (33) West, Calumet Township, Houghton County, Michigan[,] and more fully described as follows:

Commencing at a half inch diameter capped pin located on the Southerly side of Red Jacket Road Twenty-five and Forty-three Hundredths (25.43) feet North and Six Hundred Twenty-two and Seventy-one Hundredths (622.71) feet West of the Southeast corner of said Section Fourteen (14) which pin is the point of beginning of the parcel to be described: From the point of beginning thus established, thence run South Thirty-four (34) degrees Twelve (12) minutes Ten (10) seconds West a distance of Two Hundred Forty-nine and Thirty Hundredths (249.30) feet to a half inch diameter capped pin; thence North Fifty-five (55) degrees Forty-seven (47) minutes Fifty (50) seconds West a distance of One Hundred Twenty-seven and Fifty Hundredths (127.50) feet to a half inch diameter capped pin; thence North Thirty-four (34) degrees Twelve (12) minutes Ten (10) seconds East a distance of Two Hundred Thirty-four and Forty Hundredths (234.40) feet to a half inch diameter capped pin and Red Jacket Road; thence South Sixty-two (62)

degrees Twenty-six (26) minutes Thirty (30) seconds East along Red Jacket Road a distance of One Hundred Twenty-eight and Thirty-five Hundredths (128.35) feet more or less to the point of beginning and containing Seventy-one Hundredths (0.71) of an acre more or less.

Subject to all easements, reservations, exceptions, conditions and restrictions contained in prior conveyances of record.

November 24, 1972

Charles E. Hein

R.L.S. No. 13034

(Note: RLS= Registered Land Surveyor)

4. Builder, contractor, suppliers: The Calumet and Hecla Engineering Department supervised the surface crews who, under surface foremen, built the warehouse. Drawings for the first sprinkler system and for elevators were submitted by the General Fire Extinguisher Co., (A.W. Rowell), of Providence, the Hillary Messimer Supt. Motive Power Co., and the A. Kieckhefer Elevator Co. of Milwaukee, Wisconsin.

5. Original plans and construction: Calumet and Hecla Mining Company designers planned a building that would serve as the primary supply house for all of the mine operations. It was to have one large office, two bays by four bays, in the northeast corner of the first floor. The elevator and stairway were to be located in the eighth bay from the north in the east side of the building. The rest of the space on the first, second, and attic floors was to be devoted to storage space. Carpenters constructed some shelves between floor posts and east-west walls for small items, but most of the area was left open. Each item had its place. A clear passageway ten feet wide was left from one end of the building to the other on each floor. The attic was not as wide as the building itself but ended about twelve feet from the wall on either side.

In elevation, the east and west facades were identical as were the north and south gable ends. According to original Calumet and Hecla drawings, double doors were to occupy the central bays of all four facades. Single openings were to occur between every two window bays along the length of the warehouse. Thus, originally four double doors and eight single ones provided access to the building. A loading platform raised to the level of the door sills paralleled each facade with five steps descending to the ground at each end of the walks. A railroad siding extended along the west side of the warehouse, where train cars could be filled and emptied from the loading platform.

6. Alterations and additions: The building was used as a warehouse by a large copper mining company for three quarters of a century. While no major additions were made during that time, alterations did take place to suit the company's needs. Equipment was also modernized.

In 1944, Calumet and Hecla received plans from the A. Kieckhefer Elevator Co. of Milwaukee for an electric elevator. The new one replaced the original Calumet and Hecla designed elevator powered by a steam winch. To accommodate the elevator's drive mechanisms and a heater to keep them warm through Copper Country winters, a gabled

tower was built above the elevator shaft. In 1950 a new sprinkler system designed by the Calumet and Hecla engineers superceded the original system of General Fire Extinguisher Co. design. A truck loading ramp and porch were built in 1956 extending from the central double-doored bay in the east facade. In conjunction with this work, a one-ton, east-west overhead trolley with electric hoist serving the central bay was installed in 1958. Another overhead trolley and hoist extending from the truck loading dock to a set of scales south of the dock inside the building was also built. On the first floor, flourescent lights replaced the incandescents, which had had green shades covering the 750 Watt bulbs, according to the warehouse owner, Mr. Ken Farley. In 1968 the original steam heat provided by Calumet and Hecla central boilers was abandoned and a gas-fired boiler installed.

The majority of the alterations to the building took place in the north half of the first floor. There, partitions were built to create numerous offices, restrooms, and an entrance vestibule as the warehouse management staff expanded and additional office space was required. This work meant that one door on the west façade was bricked in and another replaced by a window. On the east façade, a window replaced a door as well. The latter work appears to have been executed years before the former. However, the dates for these alterations are not apparent. No Calumet and Hecla alteration plans for the first floor work are available, although blueprints of the original plans were used as worksheets for planning alterations. Some of the changes crayoned-in on the blueprints are dated October of 1934. Other, later ones are not dated.

The only noticeable change to the second floor is the creation of a room for storing the warehouse records. This was done in the space west of the elevator shaft and stair. And, on the attic floor, it appears that additional floor space has been created by extending the floor boards about two feet to the east and to the west.

The additions to the building are several in number but are minor in scope. In 1956 the porch which encloses the truck dock was built. The second story window above it was bricked in at that time. In 1967 an entrance porch with a single door replaced the double doors on the north facade. A third entrance porch was added at the sixth bay from the north on the east facade. The construction date for this addition is not known. All were, however, the work of Calumet and Hecla designers.

The raised loading platforms which paralleled each side of the building were removed at an unknown date.

B. Historical events & persons associated with the building

For seventy-five years, Warehouse No.1 served as the clearinghouse for all supplies used by the Calumet and Hecla Mining Company. Upon its completion, Alexander Agassiz wrote in the company's annual report of 1894, "A new brick warehouse has been completed; it is centrally located near the mine office. Into this our scattered supplies have been transferred; this will greatly facilitate the distribution of supplies." All incoming supplies went first to the Warehouse No.1 where its arrival was recorded. Then the articles might be dispatched to other

units in the mining operation. Also in the warehouse, the company stocked miners' safety equipment, which it would issue to the miners upon request.

PART II. ARCHITECTURAL INFORMATION

A. General Statement

1. Architectural character: A building type designers often neglect, the warehouse is pleasing to the eye and reflects the company's care for the sound design of its buildings. The symmetry and rhythm created by the alternation of window or door openings and the brick piers provide handsome clothing for the internal structure of the warehouse.

2. Condition of fabric: Good.

B. Description of exterior

1. Overall dimensions: This two-and-one-half story warehouse is rectangular in shape with dimensions of 54' (five bays) by 204' (17 bays). All dimensions are as specified on Calumet and Hecla drawings.

2. Foundations: Dark gray poor rock foundations with a brick watertable. Footings only, no basement.

3. Walls: Walls are red brick set in common bond with engaged piers separating all bays. In the center of the piers at the second floor level the tie bolt caps protrude. The brick is corbeled out beneath the eaves and along the gable line.

4. Structural system, framing: The warehouse is a simple, rectangular, post and lintel system. Interior posts and beam are wood and 12" x 12". They are laid out on a ten foot square module. At appropriate points, the brick walls are thickened to become piers to take the load of the beams and roof. Piers are tied to the beams with cast iron tie bolts. Iron knees, stirrups, plates, and tie bolts are also used at contact points for additional support. The roof is carried by a simple truss with diagonal struts on each side, and collar beams near the peak.

5. Porches, stoops, balconies, bulkheads: Presently, there are three enclosed entrance porches on the building. Centrally located on the north (front) facade is a recent entrance porch with a concrete foundation, brick walls to the window sill level, a glass and stainless steel door with overhead and sidelights, and a large picture window on either side of the porch walls. The porch has a gable roof with dark red-painted clapboards above the door and windows. Inside walls are covered with panel board.

Two other porches are located on the east facade. The first extends from the sixth bay from the north. It is an enclosed entrance of corrugated metal. The dark red painted wood door with its four panels of diagonal boards has a three-paned overhead. Two sagging wooden steps ascend to the wooden sill. Inside, the porch has a semi-hexagonal

ceiling and board and bead paneled walls. The third porch, added in 1955, is a truck dock located in the central bay of the east facade. The foundation is made of concrete. The walls are dark red painted clapboard and its roof is a corrugated metal covered gable. Its double sliding doors are each constructed of two panels of diagonal boards, one above the other. On the south facade of the porch there is a six-over-six window and on the north, a door. Inside, the painted gable rafters are visible. The floor is concrete with a hand operated metal ramp, which can extend from inside the building to beyond the sliding doors. The original double doors remain.

6. Chimneys: No chimneys exist, however, the stacks of five ventilators for the third floor are evenly spaced along the roof ridge.

7. Openings:

a. Doorways and doors: Three double doors and six single ones remain, the north entrance porch having replaced original double doors. Each double door is dark red painted wood with two panels of diagonal boards in the bottom and nine panes of glass above them. Those of the gable ends are the same height though narrower than the east and west doors. Single doors are also painted wood with four panels of diagonal boards. Above each is an overlight of three panes. All sills and lintels are cast iron.

b. Windows: First floor windows are six-over-six, two sash windows. Second floor windows on the gable ends are the same, however, on the east and west facades of the warehouse they are nine paned windows which pivot along the horizontal axis to open. The third floor attic story has openings only on the gable ends, where one six-over-nine double hung window has a six-paned fixed window on either side of it. Paned storm windows cover most windows. All sills and lintels are cast iron painted a dark red.

8. Roof:

a. Shape, covering: A gable roof covered with corrugated metal tops the warehouse. Fronting the edge of the roof on the east side and spanning the sixth and seventh bays from the north is a low gable attached to direct ice, snow, and rain fall.

b. Cornice, eaves: Boxed wood eaves with a flat, plain cornice board on gabled ends and no cornice on the sides.

c. Dormers, cupolas, towers: Rising from the east slope of the gable roof, near the ridge at the eighth bay from the north is a square tower, which houses the elevator works and a heater to keep the mechanisms movable in winter. The tower is covered with dark red painted corrugated metal and has a low gable roof and a small six-over-six window on its east facade.

C. Description of interior

1. Floor Plans: The warehouse was constructed to provide supply storage for all of the Calumet and Hecla mine operations. Its ground floor had one two bay by four bay office located in the northeast corner. The elevator shaft and adjacent stairway occupied an area in the east half of the building at the eighth bay from the north. Other than this, the entire building had open storage space. A central passageway running the length of the building was kept clear of supplies. In some places, shelves and cubby holes for hardware were built from the posts to the east and west walls. The second and attic level plans have changed little. One room for warehouse records was created on the second floor directly west of the elevator and stair. On the first floor, however, the north half of the building has been partitioned to create numerous offices, restroom, and an entrance vestibule.

2. Stairways: Only one stairway serves the building. Located adjacent to the elevator shaft, along its north wall, the unfinished wood steps without risers ascend towards the west.

3. Flooring: The first floor is concrete with linoleum covering the front offices' floors. The second, attic, and tower floors are unfinished wood planks of various widths.

4. Walls and Ceiling Finish: The brick walls have all been painted white as have the exposed structural elements of the ceilings. Only in the first floor offices have wall and ceiling surfaces been finished with wall board and acoustical tiles. The gable ends inside are topped with five courses of stretches paralleling the gable line with a course of headers immediately beneath the roof itself.

5. Openings:

a. Doorways and doors: Few doors existed inside the warehouse, originally. Most of the present ones are wood paneled with plain frames.

6. Decorative features and trim: None.

7. Hardware: The only distinctive hardware in the building is the door handle element on the front door inside the north porch. It is bronze with embossed scroll and bead designs along the edges of the rectangular plate. The handle is a stylized animal, perhaps a fish or snake. The thumb latch is smooth.

8. Mechanical Equipment:

a. Heating: Formerly, Warehouse No.1 was connected to the central steam system of the Calumet and Hecla Mining Company. In 1968 when mine operations ceased, a gas-fired boiler was installed with its stack projecting from the window in the fifth bay from the north on the east facade. Vertical tube radiators with scroll design remain.

b. Lighting: The warehouse has always been electrically lit. Now, fluorescent lighting has been installed extensively on the ground floor, while the incandescent lights remain elsewhere.

c. Plumbing: Plumbing serves the building's three restrooms, although it appears that plumbing was not originally installed in the warehouse.

d. Other: For fire protection, an extensive sprinkler system was installed. An electric elevator occupies a space in the east section of the warehouse in the eighth bay from the north. A one-ton trolley with electric hoist runs east-west between the central double doors. A second trolley provides access to scales inside the warehouse, south of the truck dock.

D. Site

The north gable end of Warehouse No.1 fronts Red Jacket Road. The lot to the east provides graveled parking space. Calumet and Hecla mine buildings surround the warehouse, with another large warehouse situated across Red Jacket Road from Warehouse No.1. This second, and auxiliary, warehouse housed the Calumet and Hecla supply of steel and bagged materials such as cement.

1. Historic Landscape Design: Warehouse No. 1 was the central supply house for all of the Calumet and Hecla operations and was located close to the mine office and the Calumet and Hecla workshops.

2. Outbuildings: In 1934 a gasoline storage tank and a pump house were constructed to the south of the warehouse but have since been torn down.

PART III. SOURCES OF INFORMATION

A. Primary sources

1. Blueprints of the warehouse drawings are located in the Calumet and Hecla Archives at Coppertown USA headquarters. A list of pertinent drawings follows.

Drawing No.	Date	Title
C&H#619	6/93	Plan of Location
C&H#620	6/93	Plan and Elevations
C&H#636	7/93	Windows & Door Sills & Lintels
C&H#637	7/93	Roof Truss and Flooring
C&H#638	7/93	Miscellaneous Details
C&H#642	7/93	Windows and Doors
C&H#644	n.d.	Office Details
No #	12/93	Elevator and Stairs
C&H#684	5/94	Elevator
C&H#720	5/95	Elevator Engine Controller
C&H#721	5/95	Elevator Engine Controller-Details
C&H#722	5/95	Elevator Engine Controller-Details

C&H#727	5/95	Warehouse Elevator, Miscellaneous
C&H#9803	6/34	Gasoline Storage
C&H#11394	10/50	Sprinklers, First Floor
C&H#11856	11/55	East Truck Dock, General Arrangement and Details
C&H#12019	12/56	East Truck Dock Loading Ramp & Pit Details
C&H#12276	2/58	1-Ton East-West Trolley, General Arr'g't and Details
C&H#16525	12/55	Elevation, Warehouse Partition
C&H#16817	4/59	Storage Rack
C&H#16828	5/59	Tote Boxes
C&H#19078	7/34	Gasoline Storage System
C&H#12746	10/67	Office Entrance

General Fire Extinguisher Co., A.W. Rowell, Providence Plant, November 1893, Cross Section and Plans, Sprinkler System

Hillary Messimer, Supt. Motive Power, 7/95, Warehouse Elevator

A. Kieckhefer Elevator Co., Milwaukee, Wisconsin :

Date	C&H stamped date	Title
5/34	4/44	Warehouse Electric Freight Elevator-Wiring Diagram
9/40	4/44	Gate Interlocks
9/43	4/44	Limit Switch Brackets and Cams
12/44	3/45	Landing Gates and Car Gate
12/44	3/45	Gen'l Arrangement
12/44	3/45	Elevator Gates
1/24	4/44	Quick Acting Safety Device

2. "Summary of Operations of the Calumet and Hecla Mining Co." Boston: University Press, 1893, 1894; in the archives of the Michigan Technological University, Houghton, Michigan.

3. Mr. Kenneth Farley, owner of the warehouse since 1972. Interviewed July 3, 1975.

4. Mr. Henry Dupras, former warehouse superintendent for the Calumet and Hecla Mining Company and now an employee at the North End Metal and Supply Shop, provided a walking tour of the warehouse (July 3, 1975) with description of its former role and operation.

PART IV. PROJECT INFORMATION

Documentation was done in the summer of 1975 by Kevin Harrington and Wendy Nicholas for the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER), a division of the National Park Service.

Fig. 1 Perspective view of the north (front) façade and east elevation. Photograph by author, 1975.

Fig. 1 Perspective view of the north (front) façade and east elevation. Photograph by author, 1975.

